

Appl. No. 10/675,303

Reply to Office Action of September 6, 2006

and Notice of Noncompliant Amendment of  
January 4, 2007

This listing of claims will replace all prior versions, and listings, of claims in the application.

### LISTING OF CLAIMS

1. (currently amended) A method to adapt a hearing device, comprising:
  - 5 providing evaluation data for various predetermined auditory situations;  
adapting the hearing device to a hearing aid device user with individual  
weighting via a continuous weighting function that runs via  
supporting points that respectively represent an individual weighting  
of the evaluation data of one of the predetermined auditory  
10 situations, wherein the evaluation data comprise weighting vectors  
with regard to specific audio signals that are characteristic of the  
predetermined auditory situations; and  
determining the weighting vectors by performing an eigenvector analysis  
of the specific audio signals.
  - 15
2. (original) The method according to claim 1, further comprising:
  - performing a sound signal analysis; and
  - determining the evaluation data based on results of the sound signal  
analysis.
  - 20
- 3-4. (cancelled).
5. (original) The method according to claim 1, further comprising determining the  
weighting function for the individual weighting from auditory situations  
25 characteristic for the hearing device user.

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6. (original) The method according to claim 1, further comprising determining the weighting function from at least one adaptation parameter and at least one value of the evaluation data.

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7. (currently amended) A method for operating a hearing device, comprising:

recording an audio signal of a current auditory situation;

calculating signal evaluation data from the audio signal;

weighting the signal evaluation data utilizing a continuous weighting

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function that is acquired by ~~according to one or more of the~~  
~~following:~~

~~a) utilizing supporting points that respectively represent an  
individual weighting of the evaluation data of a  
predetermined auditory situation;~~

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~~b) utilizing weighting vectors with regard to specific audio signals  
that are characteristic of a the predetermined auditory  
situation;~~

~~c) utilizing weighting vectors determined by performing an  
eigenvector analysis of the specific audio signals;~~

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~~d) utilizing weighting vectors that are determined for the individual  
weighting from auditory situations characteristic for the  
hearing device user; and~~

~~e) utilizing at least one adaptation parameter and at least one value  
of the evaluation data;~~

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adapting the hearing device according to the weighted signal evaluation  
data to the current auditory situation; and

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determining the weighting vectors by performing an eigenvector analysis  
of the specific audio signals.

8. (original) The method for operating a hearing device according to claim 7,  
5 wherein the adapting of the hearing device is performed under real-time  
conditions.

9. (currently amended) A device to adapt a hearing device, comprising:

10 a storage device configured to provide evaluation data for various  
predetermined auditory situations;  
an adaptation device configured to adapt the hearing device to a hearing  
aid device user using individual weighting;  
a continuous weighting function configured to implement, with the  
adaptation device, the individual weighting , the continuous  
15 weighing function configured to run via supporting points which  
respectively represent an individual weighting of the evaluation data  
of one of the predetermined auditory situations of the storage  
device, wherein the evaluation data comprise weighting vectors  
with regard to specific audio signals that are characteristic of the  
20 predetermined auditory situations; and  
an analysis device with which the weighting vectors can be determined via  
eigenvector analysis of the specific audio signals.

10. (original) The device according to claim 9, further comprising:  
25 a sound signal analysis device with which the evaluation data can be  
determined for the predetermined situations, and from which the  
evaluation data can be transferred to the storage device.

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11-12. (cancelled).

13. (original) The device according to claim 9, further comprising an offline  
5 adjustment device configured to determine the weighting function for the  
individual weighting from auditory situations characteristic for the hearing device  
user.

14. (original) The device according to claim 13, wherein the weighting function  
10 can be determined from at least one adaptation parameter and a plurality of the  
evaluation data via the offline adjustment device.

15. (currently amended) A hearing device, comprising:

15 a recording device configured to record an audio signal of a current  
auditory situation;

a computer device configured to calculate signal evaluation data from the  
audio signal;

a weighting device configured to weight the signal evaluation data with the  
aid of a continuous weighting function;

20 a control device or regulation device configured to adapt the hearing  
device according to the weighted signal evaluation data to the  
current auditory situation, wherein the evaluation data comprise  
weighting vectors with regard to specific audio signals that are  
characteristic of a predetermined auditory situation, and;

25 an analysis device with which the weighting vectors can be determined via  
eigenvector analysis of the specific audio signals.

Response under 37 CFR §1.116 **expedited procedure** . Examining Group: 2615 (MPEP 714.13)

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16. (original) The hearing device according to claim 15, wherein the control device or regulation device is configured to adapt under real-time conditions.